

ABSTRACT

HDART binds with HDAC (histone deacetylase) and function as a repressor. HDART directly binds with Skip functioning as a transcription co-activator of a nuclear receptor to repress the transcription of the nuclear receptor. Moreover, HDART is one of transcription co-repressors of nuclear receptor, and binds with HDAC thereby enabling intense repression of transcription through the histone deacetylation of HDAC. On the other hand, a dominant negative peptide of HDART can be obtained, and it has been confirmed that this peptide activates transcription contrary to the HDART protein of the full length. Especially, the transcription activity of retinoic acid receptor with this peptide has an activity exceeding all-trans retinoic acid (ATRA).